Serial No. 09/872,188 Amdt. Dated 13 March 2007

RESPONSE UNDER 37 C.F.R. 1.116 – EXPEDITED PROCEDURE – EXAMINING GROUP No.: 2195

Reply to Office Action of February 5, 2007

## **Amendments to the Drawing:**

Amend Fig. 1 as shown in red on the attached replacement sheet of Fig. 1.

PROCEDURE – EXAMINING GROUP No.: 2195

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## **REMARKS/ARGUMENTS**

In this Action, made final, the Examiner rejected the apparatus claims 21-37 under 35 U.S.C. §101 as being directed to non-statutory subject matter. The Examiner opined that (a) the claims appear to be claiming software alone, and (b) the claims are "not supported by either a specific and substantial asserted utility (i.e., transformation of data) or a well established utility (i.e., practical application)." This rejection is respectfully traversed.

As to the assertion that the apparatus claims appear to be claiming software alone, applicant respectfully suggests that the Examiner has failed to interpret the claim language in the manner dictated by 37 U.S.C. §112, sixth paragraph, which states that "An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof." (emphasis added) The specification describes, and the drawing shows, the apparatus to comprise a memory or any other computer-readable medium that stores programs and a processor that executes the stored programs (page 5, lines 18-21, and Fig. 1), where those programs stored in memory include a resource task-completion forecaster program and a resource scheduler program (page 5, line 31, to page 6, line 2, and Fig. 1 as amended). Therefore, according to the dictates of 35 U.S.C. §112, sixth paragraph, the means recited in the apparatus claims 21-37 must be construed to cover not only the program, but the storage medium and processor as well.

Nevertheless, to ensure that this issue is removed from contention, applicant has amended the independent apparatus claims 21 and 22 to explicitly recite a storage medium and a processor.

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As to the contention that the claims are not supported by a specific and substantial or a well-established utility, applicant respectfully asserts that the Examiner is mistaken. Independent claim 21 recites "scheduling...new tasks to be serviced...", and independent claim 22 recites "scheduling another task for servicing." Scheduling of tasks has a specific and substantial, as well as a well-established, utility.

In view of the above-mentioned remarks and amendments, applicant respectfully requests that the Section 101 rejection of his claims 21-37 be withdrawn.

The Examiner rejected claims 4-5, 21-25, and 40-41 under 35 U.S.C. §112, second paragraph, as being indefinite. In response, applicant has amended the claims to cure any perceived deficiencies therein.

The Examiner pointed out that the recitation of "means for combining the determined probabilities" lacks proper antecedent basis. In response, applicant has amended the recitation of the means for determining to explicitly state that these means "determine the probabilities of availability of the plurality of the resources," thereby providing the requisite antecedent basis.

Applicant has also amended claims 1 and 20 in a corresponding manner. Applicant has amended claim 4 in the manner suggested by the Examiner. Applicant has also amended claims 24 and 40 in a corresponding manner.

The Examiner opined that lines 10-12 of claim 21 cannot be clearly understood. In response, applicant has reordered the phrases of lines 10-12 to improve their clarity.

In view of the above-mentioned amendments, applicant requests that the Section 112, second paragraph, rejection of claims 4-5, 21-25, and 40-41 as amended be withdrawn.

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Finally, the Examiner rejected claims 1-3, 20-21, 23, 25, and 38-39 under 35 U.S.C. §102(b) over U.S. patent no. 5,963,911 (Walker et al.). This rejection is respectfully traversed.

Applicant's invention is concerned with ensuring that resources will be (are likely to be) available for any tasks that get scheduled for a future point in time. The claimed invention therefore determines the probability of availability of each one of a plurality of resources at the future point in time, and uses this determination to schedule new tasks for the future point in time.

In contrast, Walker et al. are concerned with making optimum assignments of individual tasks to individual resources to minimize a cost function, such as ensuring that each task gets completed before its deadline. Walker et al. therefore determine the time at which each resource is forecast to become available, determine the time at which each task is required to be performed, assign to each task a cost function dependent on the time at which the task will be performed, determine that total projected cost for each possible combination of tasks and resources, and select the combination that produces the smallest total projected cost.

It should be evident that the objectives and functionality of applicant's invention and Walker et al. are different from each other. Applicant's claims recite "for a future point in time, determining a probability of availability of each resource of a plurality of resources at said future point in time, to obtain the probabilities of availability of the plurality of the resources." Contrary to the Examiner's assertion, Walker et al. do no such thing. Rather, Walker et al. determine for each resource the time at which that resource is forecast to become available. The difference is one of determining probability of availability at a given time, versus determining a time of availability.

Applicant's claims further recite "combining together the determined probabilities of availability of the plurality of resources to obtain a number

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that is a result of the combining. Contrary to the Examiner's assertion, Walker et al. do no such thing. Walker et al. determine the projected cost of each combination of tasks with resources. The difference is one of combining probabilities of availability of resources, versus combining tasks with resources.

Applicant's claims further recite "using the number to schedule new tasks for the resources for the future point in time." Contrary to the Examiner's assertion, Walker et al. do not have a corresponding disclosure. Walker et al. use the smallest total projected cost (a number) to pair individual tasks with individual resources. The difference is one of possibly indefinite pairing of individual tasks with individual resources (new tasks for a plurality of resources) for a definite future time (the future point in time), versus definite pairing of individual tasks with individual resources (selecting the combination of tasks with resources that produces the smallest total projected cost) for indefinite future times (whenever the resources finish their current tasks).

From the above remarks, it should be evident that Walker et al. do not disclose, teach, or suggest applicant's claimed invention. Applicant therefore requests that the Section 102(b) rejection of his claims 1-3, 20-21, 23, 25, and 38-39 over Walker et al. be withdrawn.

Applicant takes this opportunity to amend Fig. 1 and show therein the resource scheduler 124 program that is referred to on page 6, line 2. No new matter is added thereby. A formal drawing of Fig. 1 will be submitted when the application is allowed.

The Examiner's rejections having been properly addressed and overcome, applicant respectfully suggests that the application is now in condition for allowance. Applicant therefore requests that the application be reconsidered and thereafter be passed to issue.

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Applicant believes the foregoing to dispose of all issues in the application. But, if the Examiner should deem that a telephone interview would advance prosecution, then applicant requests the Examiner to call his attorney at the number listed below.

Respectfully submitted,

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By

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